



United States
Department of
Agriculture

Natural
Resources
Conservation
Service

in partnership with

State Commission for the Conservation of Soil,
Water and Related Resources

Massachusetts Association of
Conservation Districts

Massachusetts Association of Resource
Conservation and Development Councils

Massachusetts Conservation Update

Fall 2005



Greetings from NRCS Massachusetts!



The USDA Natural Resources Conservation Service is pleased to serve the people of the Commonwealth of Massachusetts. Located in the heart of New England, Massachusetts is the region's most populous state. The Bay State is steeped in history and boasts lively urban areas, picturesque seaside communities, tiny rural towns, and a wealth of natural resources including some 520,000 acres of productive and scenic farmland.

Massachusetts agriculture today shows promise as a dynamic and vital industry. Though Massachusetts farms are small, local farmers are discovering ways to make their farms more viable by getting the most from each acre. Though Massachusetts ranks only 43rd among all states in agricultural production, it ranks 14th in net farm income per farm and fourth in net farm income per acre.

Bay State farmers are remaining viable despite challenges such as higher labor and production costs than in many other states and a short growing season. The state's strong economy and its proximity to large population centers exert pressure to develop farmland for residential, commercial and industrial uses.

Massachusetts farmers have responded to these challenges and found ways to coexist and even benefit from their close proximity to consumers. And NRCS is working to help farmers respond to their conservation challenges.

We are pleased to present here a sampling of some of the good conservation work that NRCS is doing here in Massachusetts along with conservation districts and our other partners. We look forward to working with them to put even more conservation on the ground in the future.

I hope that you find the information in this booklet useful. If we can provide additional information or assistance, please don't hesitate to let us know. A list of NRCS field offices and our conservation district partners appears on the back of this booklet.

Thanks for your interest in Massachusetts agriculture and conservation!

Sincerely,

A handwritten signature in black ink that reads "Cecil B. Currin".

CECIL B. CURRIN
State Conservationist

\$12 million in cost-share and farmland protection funding for Massachusetts farmers

The USDA Natural Resources Conservation Service has received more than \$12 million in federal conservation cost-share and farmland protection funding this year to help Massachusetts farmers address natural resource concerns and preserve their land for future generations.

With financial and technical assistance from NRCS, farmers and other landowners will continue to promote environmental quality on farmland, address water quality and quantity challenges, and protect valuable wetland ecosystems and wildlife habitat.

"These funds will help Massachusetts landowners remain good environmental stewards by working in partnership with NRCS field staff in communities across the commonwealth," said State Conservationist Cecil B. Currin.

"USDA remains committed to providing conservation tools and resources to ensure that Bay State land remains healthy and productive," said Currin.

Cost-share funding is available through several voluntary conservation programs authorized in the 2002 Farm Bill. Through these programs, landowners may receive up to 75 percent of installation costs for conservation practices, depending on producer, land and practice eligibility criteria.

Farm and Ranch Land Protection Program funds are administered through the state Department of Agricultural Resources' Agricultural Preservation Restriction (APR) program.

FY 2005



USDA Natural Resources Conservation Service FY 2005 - Massachusetts

DISCRETIONARY FUNDS	FY2004	FY2005
Conservation Operations		
Technical Assistance	\$3,432,439	\$2,721,414
Soil Survey	\$855,000	\$905,000
Watershed Surveys and Planning	\$128,500	\$507,100
Watershed and Flood Prevention		
Watershed Operations	\$243,000	\$388,374
Watershed Rehabilitation	\$135,000	\$115,081
Resource Conservation & Development	\$391,500	\$381,000
TOTAL - Discretionary Funds	\$5,185,439	\$5,017,969

MANDATORY FUNDS (Financial assistance for cost-share programs)	FY2004	FY2005
Agricultural Management Assistance	\$377,114	\$371,957
Environmental Quality Incentives Program (EQIP)	\$6,453,000	\$4,952,573
Farm and Ranch Lands Protection Program (FRPP)	\$3,926,200	\$4,498,859
Grassland Reserve Program (GRP)	\$705,000	\$968,758
Wetlands Reserve Program (WRP)	\$535,000	\$513,820
Wildlife Habitat Incentives Program (WHIP)	\$875,000	\$1,553,960
TOTAL - Mandatory Funds	\$12,871,314	\$12,896,327

About Massachusetts



Massachusetts at a Glance

Massachusetts is one of the original 13 states (6th) of the Union (February 6, 1788). Boston, the capital, dates from 1630.

- **Official Name:** Commonwealth of Massachusetts
- **Nickname:** Bay State
- **Capital:** Boston
- **Motto:** *Ense Petit Placidam Sub Libertate Quietem* (Translation: By the Sword We Seek Peace, But Peace Only Under Liberty)

Population: 6,349,097 (2000 Census)

Chief cities and their populations:

- Boston: 589,141
- Worcester: 172,648
- Springfield: 152,082
- Lowell: 105,167
- Cambridge: 101,355
- New Bedford: 93,768
- Brockton: 94,304
- Fall River: 91,938
- Lynn: 89,050
- Quincy: 88,025

Geography

- **Area:** 8,257 square miles (land/water) 4,633,426 acres
- **Largest body of water:** Quabbin Reservoir (39 sq. miles)
- **Longest river:** Charles River (80 miles)
- **Highest elevation:** Mt. Greylock (3,491)
- **Lowest elevation:** Atlantic Ocean
- **Number of state parks:** 107
- **Largest state park:** October Mountain State Forest, Lee (15,710 sq. acres)
- **Number of national historical parks, seashores and historic sites:** 12
- **Largest national area:** Cape Cod National Seashore (43,500 sq. acres)

Government:

Constitutional Officers:

- **Governor:** Mitt Romney
- **Lieutenant Governor:** Kerry M. Healey
- **Secretary of the Commonwealth:** William Francis Galvin
- **Treasurer and Receiver General:** Timothy P. Cahill
- **Attorney General:** Thomas Reilly
- **Auditor:** A. Joseph DeNucci

Legislature:

Official Name: General Court

- **Senate:** 40 members elected every two years.
- **House of Representatives:** 160 members elected every two years.

Population and area

Massachusetts, according to the 2000 United States census, has a population of 6,349,097. It has a gross area of 8,257 square miles and a net land area of 7,838, and ranks 13th in population and 45th in area among the states of the nation. It is divided into 14 counties, made up of 50 cities and 301 towns, of which Boston with a population of 589,141 is the largest and Gosnold with a population of 86 is the smallest.

Boundaries

Massachusetts has a shoreline of approximately 1,980 miles on the Atlantic Ocean, Massachusetts Bay, and Buzzards Bay. The state is 190 miles, east-west, and 110 miles, north-south, at its widest parts. The northern, or New Hampshire-Vermont border, runs almost due east and west for 135 miles; the western, or New York boundary, is 49 miles long. On the south, Massachusetts borders Connecticut for 91 miles and Rhode Island for 65 miles.

Counties

The 14 counties, moving roughly from west to east, are Berkshire, Franklin, Hampshire, Hampden, Worcester, Middlesex, Essex, Suffolk, Norfolk, Bristol, Plymouth, Barnstable, Dukes and Nantucket. In 1997, Middlesex county government was abolished followed by the abolition of Berkshire, Essex, Hampden and Worcester county governments. Their functions were turned over to state agencies. Counties as geographical/political regions were not abolished or restructured.

Municipalities

The cities of Massachusetts are governed by Mayors and City Councils, but towns are usually governed by groups of officials called Selectmen. A Board of Selectmen is usually elected for a one-or-two-year term, and town meetings, a tradition from Colonial times, are still held regularly.

Congressional districts and delegation

Massachusetts has ten congressional districts. The Massachusetts congressional delegation includes Sen. Edward M. Kennedy (D), Sen. John F. Kerry (D), Rep. John Olver (D-1st), Rep. Richard E. Neal (D-2nd), Rep. James P. McGovern (D-3rd), Rep. Barney Frank (D-4th), Rep. Marty Meehan (D-5th), Rep. John F. Tierney (D-6th), Rep. Edward J. Markey (D-7th), Rep. Michael Capuano (D-8th), Rep. Stephen F. Lynch (D-9th), Rep. William Delahunt (D-10th).

Topography

Massachusetts topography varies greatly; from the rocky shores, sandy beaches and salt marshes of the coast; through rolling hills, and fertile valley to lofty wooded hills in the west.

Soils

Massachusetts soils vary widely in color and in character. Broadly speaking, the uplands contain an abundance of mineral matter, while more or less organic matter is present in the lowlands. The western region is hilly and is separated by the Connecticut River Valley from a central upland plateau region which slopes to the Atlantic coast. Except on Cape Cod where there are long stretches of sandy, treeless flats, almost all of the land was originally covered with dense forests.

Even after the forests were cleared or thinned, however, the soil did not yield readily to cultivation by the early farmers, and their skill and patience were taxed heavily before it became productive. The most arable soil is found in the broad Connecticut Valley in the west-central part of Massachusetts. Rich alluvial deposits are found in the fertile river valleys.

Rivers

There are 4,230 miles of rivers within the Commonwealth of Massachusetts. The largest is the Connecticut, which flows from north to south. Its tributaries are the Deerfield, Westfield, Chicopee, and Miller's rivers. In the far western part of the state the Housatonic River flows south and the Hoosic River flows north between the Hoosac and Taconic mountain ranges.

The Merrimack River, in the northeast, rises in New Hampshire and empties into the Atlantic Ocean. It is navigable for shipping up to a distance of about 15 miles from its mouth. The Nashua and Concord rivers are tributaries of the Merrimack. The Blackstone River flows south from the center of Massachusetts. The Mystic and Charles rivers flow into Boston Harbor, and the Taunton River enters Mount Hope Bay at Fall River.

Lakes

Massachusetts has more than 1,100 lakes and ponds. The largest of these, Quabbin Reservoir (24,704 acres) and Wachusett Reservoir (4,160 acres) are manmade. These two reservoirs will provide Metropolitan Boston with most of its water for many years to come.

Climate

Average monthly temperatures in Boston range from 28.2 degrees in January to 72.0 degrees in July. The lowest temperature recorded by the U.S. Weather Bureau in Gloucester since its establishment (October 1870) was -18 degrees in February 1934; the highest, 104 degrees in July 1911. The last killing frost generally occurs before May 10, and the earliest fall frost usually comes in late September or early October. The normal annual precipitation is 44.23 inches.

Key conservation issues in Massachusetts

- Open space and farmland protection
- Water quality and quantity
- Local food production
- Farm viability enhancement
- Cranberry industry sustainability
- Dairy industry sustainability

Topography and Climate

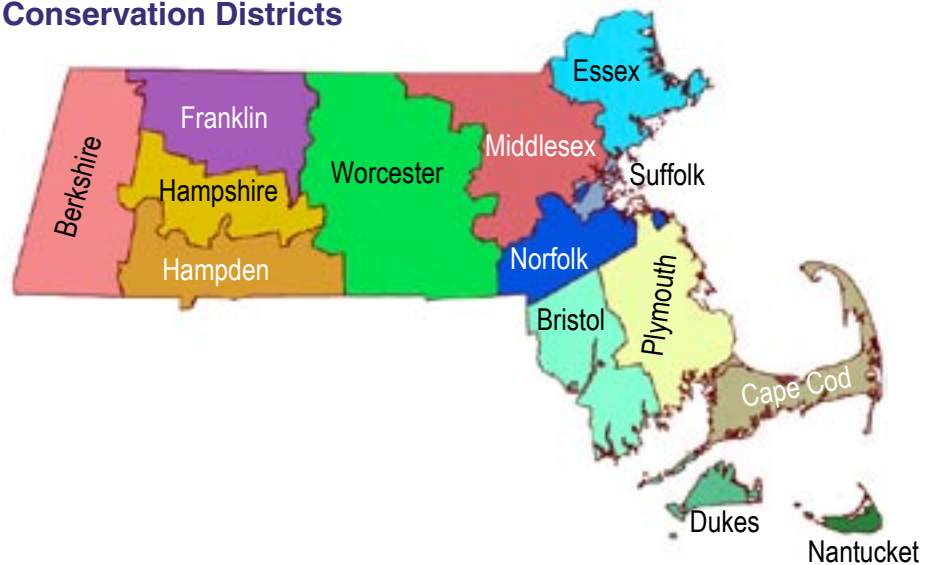


Massachusetts Maps

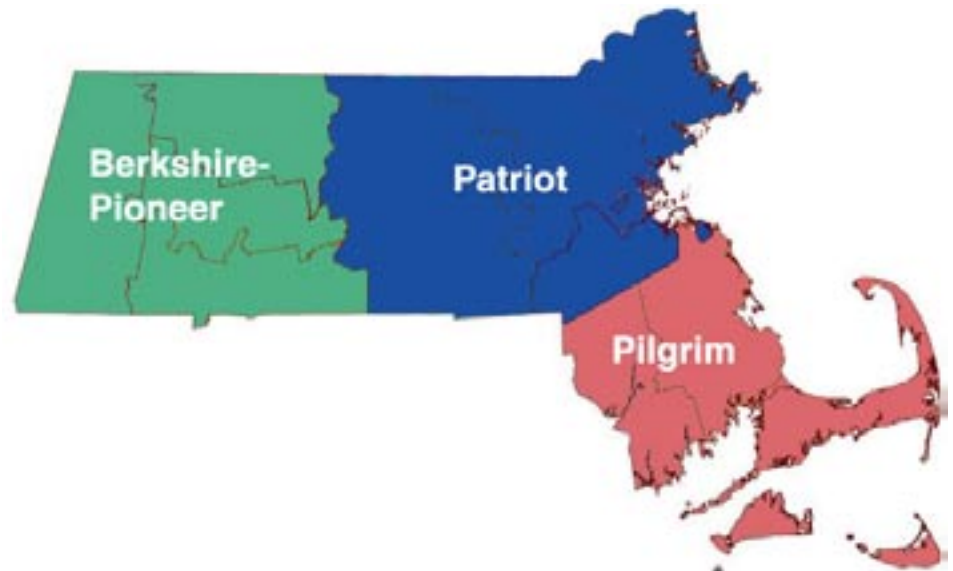
NRCS Offices



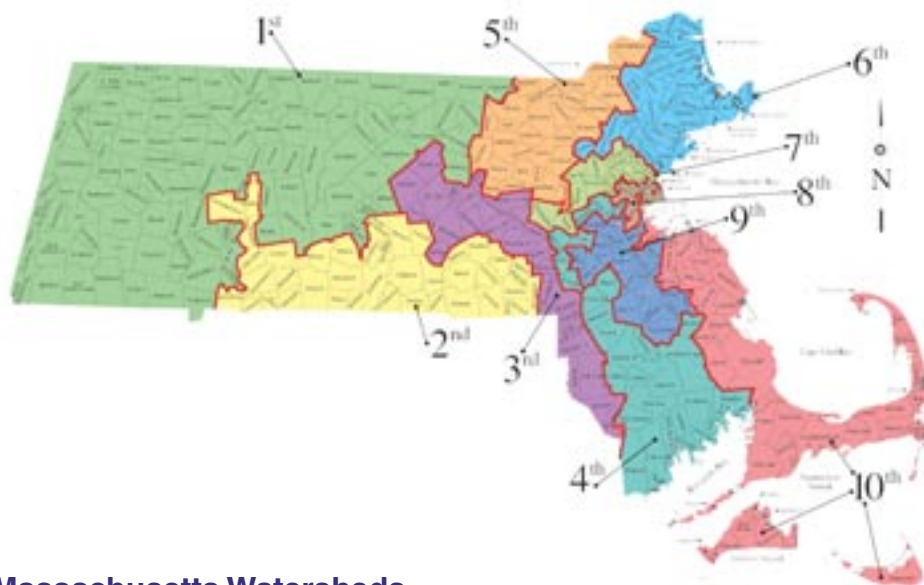
Conservation Districts



Resource Conservation & Development Areas



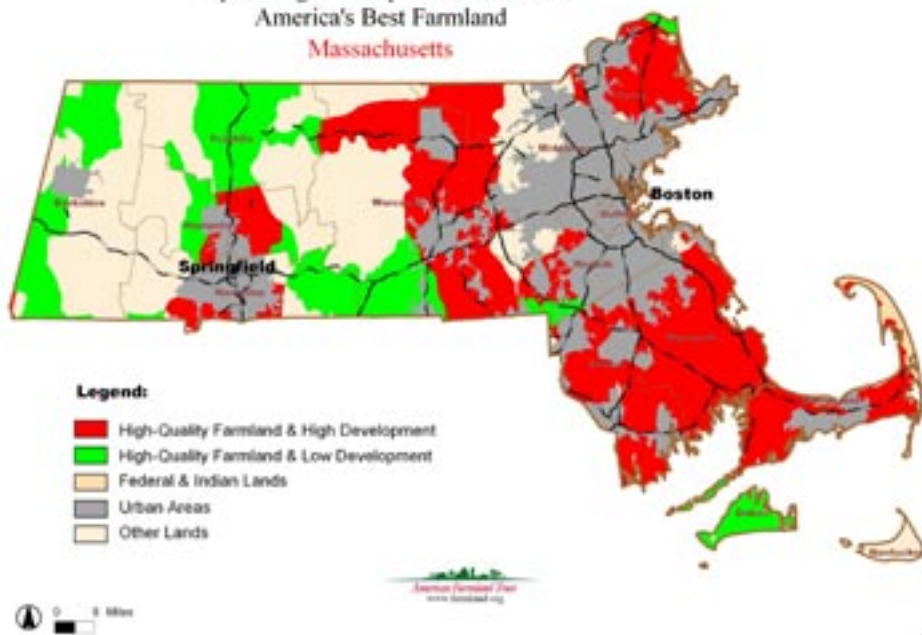
Massachusetts Congressional Districts



Massachusetts Watersheds



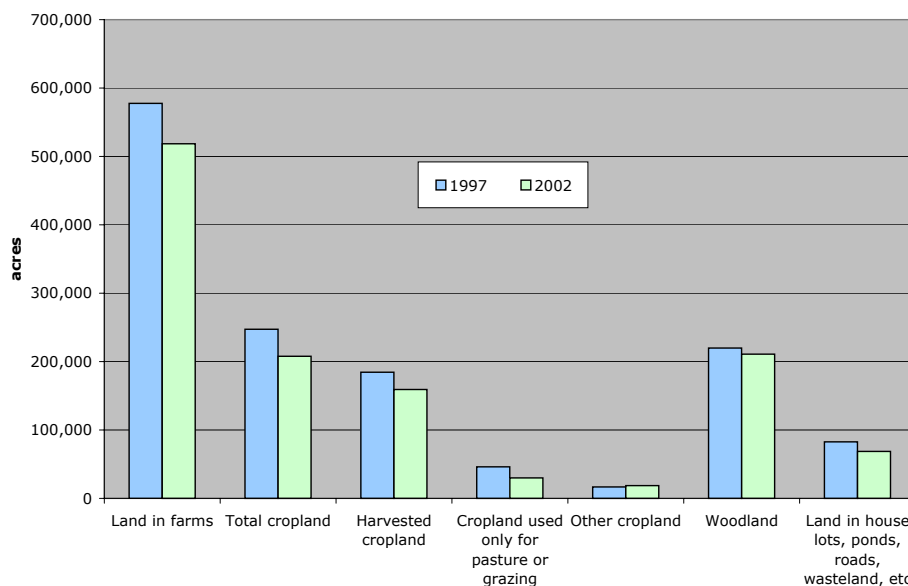
FARMING ON THE EDGE Sprawling Development Threatens America's Best Farmland Massachusetts



Massachusetts Agricultural Profile

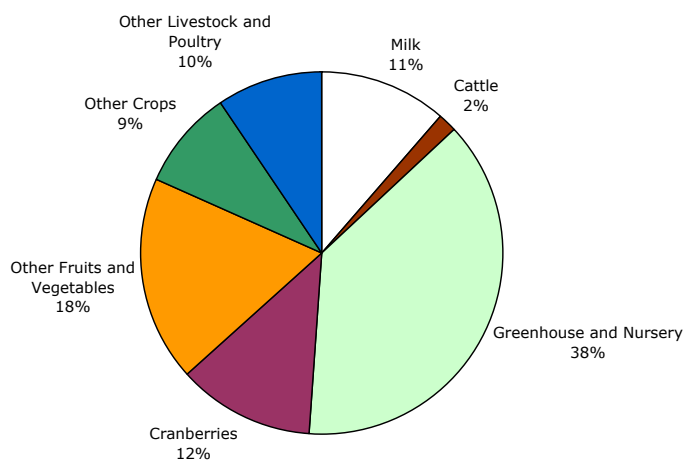


Agricultural land use in Massachusetts



	acres	1997	2002
Land in farms		577,637	518,570
Cropland		247,267	207,734
Harvested cropland		184,480	159,253
Cropland used only for pasture or grazing		46,060	29,858
Other cropland		16,727	18,623
Woodland		219,765	210,891
Land in house lots, ponds, roads, wasteland, etc		82,703	68,666

Agricultural Cash Receipts



	1,000 dollars
Milk	\$ 43,296
Cattle	\$ 7,092
Greenhouse and Nursery	\$ 145,865
Cranberries	\$ 47,701
Other Fruits and Vegetables	\$ 70,465
Other Crops	\$ 33,593
Other Livestock and Poultry	\$ 36,734

Source: USDA New England Agricultural Statistics Service

Massachusetts Agriculture

- Number of farms..... 6,100
- Farmland 520,000 acres
- Agricultural cash receipts\$417 million
- Sales of farm products sold directly to consumers\$31 million
- New England rank for direct sales to consumers #1
- Percentage of N.E. total 38 percent
- National rank for direct sales to consumers..... #7
- National rank for direct sales as a percent of total sales #1
- Percentage of family-owned farms..... 80 percent
- Percentage defined as “smallfarms” by USDA..... 93 percent
- Annual expenses for farm inputs\$216 million
- Average per acre value of farmland \$9,300
- National rank for farmland value #4
- Net farm income per acre.....\$63
- Year-round farm workers 5,000
- Seasonal farm workers 9,000
- Wages paid by farms\$99 million
- Agricultural exports\$300 million
- Agricultural export-related jobs 3,600
- Income tax revenue generated\$21 million

Sources: *New England Agricultural Statistics, 2003* and *U.S. Census of Agriculture, 2002 (USDA)*.

FACT: Ten Massachusetts counties rank in the top 150 U.S. counties for sales of farm products sold directly to consumers. Of the nation’s 3,066 counties, here’s how Massachusetts counties rank: Worcester 4th, Middlesex 6th, Essex 25th, Bristol 38th, Hampshire 42nd, Barnstable 101st, Berkshire 112th, Franklin 116th, Plymouth 131st, and Norfolk 149th.

Conservation in Massachusetts

- Farmland protected through ag. restrictions since 1977 52,735 acres
- Farmland lost since 1977 57,359 acres
- Agricultural land converted to developed uses 1992-1997.... 27,200 acres
- State rank by percentage of ag. land developed 2
- Average annual rate of ag. land developed 5,440 acres
- State dollars spent on agricultural restrictions since 1977\$126 million
- Farmland protected with federal funds 7,500 acres
- Federal dollars spent on agricultural restrictions since 2002\$12 million
- Towns with protected farmland 148
- Early successional wildlife habitat protected in 2003 368 acres
- Wetland and riparian habitat restored 2002-2004 405 acres
- Salt marsh restored in 2003 78 acres
- Grassland protected in 2003 118 acres
- Cropland protected from erosion 2001-2004 3,767 acres
- Land protected from flooding 2001-2004 4,762 acres
- Land benefitting from water conservation 2002-2004 10,712 acres
- Land protected through nutrient management 2002-2004 13,440 acres

Sources: *USDA Natural Resources Conservation Service, Massachusetts state office and National Resources Inventory; Massachusetts Department of Agricultural Resources*

Fingertip Facts

Massachusetts agriculture today shows promise as a dynamic and vital industry. Though Massachusetts farms are small, local farmers are discovering ways to make their farms more viable by getting the most from each acre, they are responding to challenges like high production costs and development pressure, and they are finding ways to benefit from their close proximity to consumers.



Conservation is important to all Massachusetts citizens because it safeguards fresh air, pure water, healthy soils, scenic vistas, productive farms and habitat for wildlife. It is essential to the quality of life that all Massachusetts citizens expect. Conservation is important not only on farms but also in communities and backyards across the Commonwealth.

Programs and Results



The 2002 Farm Bill has benefitted Massachusetts farmers by providing financial and technical assistance enabling farmers to adopt new conservation practices and enhance their operation. There is rising demand for NRCS services.



Farm Bill Programs FY2005

Massachusetts landowners, working in partnership with NRCS, implemented some **\$12 million** worth of conservation projects in 2005 that will safeguard water quality, preserve farmland, improve wildlife habitat and protect wetlands across the Bay State. NRCS programs provided cost-share assistance for the projects.

Agricultural Management Assistance (AMA)

Agricultural Management Assistance (AMA) provides cost share assistance to agricultural producers to voluntarily address issues such as water management, water quality, and erosion control by incorporating conservation into their farming operations. In Massachusetts, cost-share is available to producers for drought mitigation.

In FY 2005, Massachusetts received AMA funds totaling **\$272,000** which funded **13** contracts on **175** acres.

Wildlife Habitat Incentives Program (WHIP)

WHIP is a voluntary program that provides technical and financial assistance to landowners who want to improve fish and wildlife habitat or restore natural ecosystems on their land.

Massachusetts received nearly **\$1.2 million** in FY 2005, which funded **53** projects that protected or restored **1,191** acres of habitat.

Wetlands Reserve Program (WRP)

WRP offers an opportunity for landowners to voluntarily protect, restore and enhance wetlands on their property. In FY 2005 Massachusetts received **\$460,000** in WRP funding to restore **90** acres of wetlands on **four** properties.

Grassland Reserve Program (GRP)

GRP helps landowners restore and protect grassland, rangeland, pastureland, shrubland and certain other lands, and provides assistance for rehabilitating grasslands.

In FY 2005 Massachusetts received **\$780,000** which funded **49** rental agreements.

Farm and Ranchland Protection Program (FRPP)

FRPP provides funds to purchase the development rights to farmland, preserving productive farmland for agricultural use.

In FY 2005 Massachusetts received **\$4.3 million** for the acquisition of farmland conservation easements. A cooperative agreement was entered into with the Massachusetts Department of Agricultural Resources (MDAR).

In Massachusetts, FRPP funds are administered through the MDAR's Agricultural Preservation Restriction Program.

The agreement will result in the preservation of: **1,200** acres on **24** farms.

Environmental Quality Incentives Program (EQIP)

EQIP is NRCS's flagship program. Through EQIP, farmers may receive financial and technical help with structural and management conservation practices on agricultural land.

Massachusetts ranks and approves applications for funding based on one statewide process, developed in accordance with national guidance and in conjunction with priorities identified by the State Technical Committee and Local Work Groups.

NRCS received a total of **291** applications from farmers to make agricultural improvements through the EQIP program in FY 2005. The application proposals totaled more than **\$6 million** in federal cost share.

The associated projects mostly focused on water quality protection and water use savings. Massachusetts received a total cost share allocation of **\$4 million** that supported **164** contracts.

Here's the breakdown of contracts by commodity:

Dairy and other livestock

- **47** contracts
- **\$1,976,405** in cost-share

Cranberry

- **70** contracts
- **\$1,122,016** in cost-share

Vegetable and orchard

- **26** contracts
- **\$610,909** in cost-share.

Aquaculture

- **21** contracts
- **247,909** in cost-share

Conservation Security Program 2005

Success Stories

CSP is designed to reward producers for historic conservation activities on agricultural lands and to provide enhancement payments for producers who agree to implement additional conservation measures. Eleven farms in Berkshire and Essex counties were selected for their conservation stewardship through CSP. Annual contract payments in Massachusetts will total nearly \$100,000 statewide over five years.

For Berkshire County farmer, clean water is key to conservation stewardship

Standing behind George Noble's farmhouse, looking over his corn field to the rolling Berkshire hills beyond, you'd never guess that Tweenbrook Farm is within the city limits of Pittsfield, Massachusetts. But despite its city zip code, the farm is nestled on 110 acres between the Housatonic River on the west, Sykes Brook on the south and Sackett Brook on the north.

Tweenbrook Farm's location along with Noble's record of good conservation practices made the farm eligible for the federal Conservation Security Program (CSP). Noble was one of the first Massachusetts farmers selected for this landmark program.

The Housatonic/Farmington watershed was one of 202 watersheds across the country, and one of two in Massachusetts, selected for CSP in 2005.

Historically a dairy farm milking 75-100 head of Holsteins and Jerseys, Tweenbrook Farm now produces sweet corn, butternut squash, and hay.

He sells the sweet corn at the farmstand, the squash he sells both retail and wholesale. He sells 25,000 bales of hay a year to horse farms in the area.

Noble owns some 110 acres but farms about 300 through leased and rented land. His own land is protected through a state agricultural preservation restriction and borders a state wildlife area.

"The biggest natural resource concern that we have is clean water and keeping rivers and streams from being polluted," said Noble. "It's very important to keep the water supply clean and eliminate runoff."

To that end, Noble practices strip cropping and minimum tillage. He also has worked with NRCS to develop a conservation plan that includes crop rotation, cover cropping for the winter and integrated pest management.

"Any thing we can do to conserve natural resources, we've tried to do here at the farm. I've been working with NRCS since I took over the farm. Any practice that came along that looked like we needed to do, we signed up for," said Noble.

Of CSP, Noble says that he'd like to see it offered to more farmers in Berkshire County because it benefits farmers who have tried to protect the water resources.

"I think water quality is the wave of the future. It's something that the whole world is going to have to look at," he said.

Essex County farmers are stewards of land pressured by development and steeped in history

The quiet of Robert and Kathleen Brown's farmland in West Newbury, where the whisper of summer breezes is disturbed only by the chirping of birds and the buzzing of honey bees, stands in contrast to the sounds of traffic that carry over the hayfield behind their Farmer Brown's Farmstand on busy Maple Street in Middleton.

Yet thanks to the Brown's conservation efforts in both locations, they are being recognized as conservation stewards through the Conservation Security Program (CSP) in 2005. Of the 233 acres that they farm in both towns, 48 have been enrolled in CSP.

The Ipswich/Merrimack/North Coastal watershed was one of 202 watersheds across the country, and one of two in Massachusetts, selected for CSP in 2005.

Robert Brown, who raises hay, vegetables and flowers, said that haying is the best use for much of his hilly land, which is highly erodible and too steep to plow. The CSP land behind the farmstand in Middleton is bordered by the Ipswich River and his West Newbury land neighbors a state wildlife area.

Brown also notes the pressures and benefits of farming in this densely populated area north of Boston. "Farming is tough in New England. There are 100,000 people in a 15 mile radius of here and 15,000 cars a day on this road," said Brown of his Middleton location. "Yet the people who are encroaching are also our customers."

In nearby Ipswich, one of the nation's newest CSP farms is also one of the country's oldest farms. Established in 1638 as a land grant to Samuel Appleton, Appleton Farms is one of the oldest continuously operating farms in the United States and has been recognized by the Commonwealth of Massachusetts as a Century Farm.

Scenic views of rolling grasslands, grazing livestock, ancient stone walls, tree-lined carriage paths, and historic farm buildings are all part of the legacy of nine generations of Appleton family members kept alive through the work of The Trustees of Reservations.

Today, The Trustees is continuing the farm's progressive agricultural traditions while preserving the property's landscape and farm buildings and enhancing the ecological values of its woodlands, wetlands, and fields, such as the 133-acre Great Pasture which supports one of the largest populations of rare grassland birds in Massachusetts. Farm operations include a community-supported agriculture, a retail feed and mulch haying operation, and livestock and dairy programs that include White Park and Jersey cows.

Programs and Results



George Noble



Kathleen and Robert Brown



Appleton Farm

Projects and Milestones

Federal and State Farmland Protection Efforts Continue

Massachusetts' strong economy and its large population centers exert intense pressure to develop farmland for residential and commercial uses.

The Bay State's roughly 6,100 farmers generate close to \$400 million annually in wholesale cash receipts. Local farms also keep more than 520,000 acres of farmland in active production.

Agricultural acreage in Massachusetts has dropped by more than 1.5 million acres since 1945, an alarming rate of decline which has prompted the state and its rural communities to develop strategies for protecting farmland.

NRCS works hand-in-hand with the Massachusetts Department of Agricultural Resources to protect prime Bay State farmland. Since 1996, NRCS has provided \$8.2 million in Farm and Ranchlands Protection Program funds to the state's Agricultural Preservation Restriction program to purchase farmland development rights on nearly 6,000 acres.

Since its first acquisition in 1980, the APR program has invested nearly \$126 million in protecting some 51,000 acres in 148 towns across the Commonwealth.

NRCS, primarily through RC&D program areas, is also supporting a growing number of local communities that are forming town agricultural commissions to address issues like farmland protection. RC&D coordinators are working with partners including local and regional agricultural organizations and the state agriculture department to provide informational resources to ag commission organizers.

Cranberry Farm Planning Program helps growers for more than a decade

The Plymouth County Conservation District marked a decade of helping cranberry growers develop plans to protect the region's natural resources in June of 2004.

The Cranberry Farm Planning Program was started to meet the growing demand for farm conservation plans in the commonwealth's cranberry growing counties. Pilot funding from the Cape Cod Cranberry Growers Association was matched by the state Executive Office of Environmental Affairs and NRCS.

Patriot RC&D awarded grant to research improved erosion control at construction sites

The Patriot Resource Conservation and Development Area Council has been awarded a \$269,000 grant through the state Department of Environmental Protection with funding from the U.S. Environmental Protection Agency for a research project designed to improve erosion and sedimentation control at construction sites. With matching funds of \$213,000, the project budget will total \$482,000.

The three-year grant, starting in the spring of 2006, will be conducted at the Olmsted Green construction site in Mattapan, a 38-acre mixed-use development project on the former Boston State Hospital property.

The goal of the project is to facilitate the use of compost and amended soils to control erosion, manage storm water runoff, and reduce nonpoint source pollution during and after construction.

The project will compare the compost-based methods with current standard methods such as geosynthetic silt fencing and hay bales. Compost and mulches will be donated by Apple D'Or Tree, Inc. and WeCare Organics, LLC.

A model vegetated "green roof" will also be installed and evaluated for its ability to retain and reduce releases of storm water. The unit will be accessible for educational programs and visitors touring the site.

Organizations including City Soil & Greenhouse, Co., Soil & Water Quality Alliance, New Ecology, Inc., Lena New Boston, Suffolk County Conservation District, Vanasse Hangen Brustlin, and seven additional non-profit organizations, private companies and government agencies will provide financial and in-kind resources.

"The Boston State Hospital site was selected because recent construction there has released thousands of tons of soil through erosion," explained Patriot RC&D Council acting president Joseph Lawless. "In addition, the Canterbury Brook was contaminated with sediment containing lead and other toxins, so reduction of future contaminants is a major goal."

"We've also included a substantial outreach and education component in conjunction with Mass Audubon's Boston Nature Center," said Lawless.

The Patriot area covers five counties in central and northeastern Massachusetts that have urban, suburban and rural areas.



USDA announces Web Soil Survey

Massachusetts farmers, conservationists, engineering firms, and city planners now have quick and easy access to the USDA's national soils information. NRCS has launched the Web Soil Survey website, which will provide secure public access to soils data.

"Until now soil survey maps, which help landowners and land use professionals make informed land use decisions, were only available in printed form," said NRCS State Conservationist Cecil B. Currin. "Posting soil survey information on-line is one more step in our effort to make information more accessible to the citizens we serve."

To view the Web Soil Survey website go to <http://websoilsurvey.nrcs.usda.gov>.

Soil surveys began in 1899 as part of the nation's earliest conservation efforts. Known as the National Cooperative Soil Survey, it has evolved into a partnership of state and federal agencies working together to collect, classify, interpret and provide soils information.

The soil survey books will be phased out slowly through the federal government's initiative of electronic government information (eGov).

Currently, NRCS has soils maps and data available online for more than 95 percent of the nation's counties and anticipates having 100 percent in the near future.

Cape Cod Water Resources Project

Based on requests from sponsors, NRCS has proposed an extensive restoration project on Cape Cod to address area-wide natural resource problems caused by stormwater run-off and restore degraded saltmarshes and anadromous fish runs in this coastal area that is pressured by urban development and is a popular recreation area with a high influx of tourists during the summer.

The Cape Cod Water Resources Restoration Project will address these issues through the Small Watershed Program and will include conservation improvements that are scheduled for implementation over a period of years. NRCS will be the lead technical assistance agency working with a partnership comprised of the Cape Cod Conservation District, Barnstable County Commissioners and other federal, state and local agencies, as well as all Barnstable County towns. The project is still in the planning phase and has not yet been fully funded.

Grant will improve services to grass-based livestock operations

NRCS this year presented the New England Small Farm Institute (NESFI) with a \$110,000 federal Conservation Partnership Initiative (CPI) Grant for a project that will improve conservation services to local farmers with grass-based livestock operations in the Chicopee River Basin.

NESFI is one of only six organizations nationwide selected to receive a CPI grant this year, and the only organization east of the Mississippi River.

NESFI will lead a partnership of nine organizations to develop a service network to assure good conservation practices on grass-based livestock farms. The project will focus on new farmers and start-up enterprises.

CPI grants are administered by the USDA and are designed to foster conservation partnerships and fund projects that focus technical and financial resources on conservation priorities in watersheds of special significance and other geographic areas of environmental sensitivity. CPI is open to state and local governments, tribes and nongovernmental organizations with a history of working with agricultural producers.

Small-scale livestock enterprises are increasingly common in New England's upland watersheds. The region's soil base, hilly terrain, and rain-rich climate are particularly suited to grazing operations. Consumer demand is strong for grass-based farm products because of their social and economic acceptability, as well as their dietary value. Market proximity and well established buy-local campaigns provide regional farmers with a competitive advantage in providing "native grown."

"Grass-based farming and livestock enterprises are central to the future of agriculture in this area," Currin said. "This grant will support the development of locally-led solutions to their natural resource concerns. NESFI is well suited to helping them cooperate and share information to address their environmental challenges."

Projects and Milestones



Projects and Milestones

After four decades, USDA dams still silent protectors of SuAsCo watershed towns

Ten dams built by the U.S. Department of Agriculture's Soil Conservation Service (SCS) between 1962 and 1987 in the Sudbury-Assabet-Concord rivers watershed – also known as the SuAsCo watershed – are today providing an estimated \$1.7 million in annual flood damage reduction benefits in eastern Massachusetts.

NRCS is assisting the Massachusetts Department of Conservation and Recreation, which owns the dams, in monitoring the structures to ensure that the dams continue providing flood protection to this continuously growing area west of Boston. The two agencies routinely check the dams after significant storms.

"Significant urban development has occurred in the watershed since the time these dams were built," said Cecil B. Currin, Massachusetts State Conservationist. "In addition to checking these dams after storms, we are evaluating the effects of land use changes on these dams and assessing any rehabilitation needs."

The SuAsCo dams control a drainage area of some 65 square miles and provide available flood storage of more than four billion gallons. That capacity was needed this spring when rains fell on saturated ground and combined with snowmelt, increasing the amount of surface runoff from the watershed.

The dams were constructed by SCS through a project planned in 1958 by the Middlesex and Worcester conservation districts to protect the area from the type of destruction caused by Hurricane Diane three years earlier. The flooding from that storm resulted in an estimated \$2 million (\$14 million in 2005 dollars) in damage to homes, businesses, roads, bridges, and farms.

"These 10 structures helped reduce the peak flows and flood levels downstream and provided flood damage reduction benefits, particularly on the Assabet River," said Currin. "These dams are silent protectors for the SuAsCo watershed communities."

The 377-square mile SuAsCo watershed encompasses, partially or wholly, 36 Massachusetts towns. The dams are located in the towns of Berlin, Framingham, Marlborough, Northborough, Shrewsbury, Stow, and Westborough.

NRCS assists with stabilization of Taunton, Mass. dam

In October 2005, NRCS approved up to \$200,000 in federal funds to be available for stabilization of the Whittenton Pond Dam in Taunton, Mass. The funds were provided to the City of Taunton through the Emergency Watershed Program (EWP) administered by NRCS. The agency also provided technical assistance for the work.

Taunton Mayor Robert G. Nunes requested the federal assistance on Tuesday due to concern that the dam would fail under the pressure of increased water levels caused by an extended period of heavy rains, threatening public safety and property downstream.

Massachusetts NRCS engineers were on-site to help assess the condition of the dam and provide technical assistance in the stabilization work. NRCS will cover 75 percent of the cost of the work up to \$200,000.

Through the EWP program, NRCS provides technical and financial assistance to reduce the threat to life and property from excessive erosion and flooding caused by the sudden impairment of a watershed from a natural disaster.

Helping Towns Organize Agricultural Commissions

The Pilgrim Resource Conservation and Development (RC&D) Area Council in Southeastern Mass. has developed a unique resource for farmers, residents and town officials statewide who are concerned about maintaining farming in their community.

"A Toolkit for Organizing a Town Agricultural Commission" is a package of materials on CD-ROM that will guide the user through the process of organizing an agricultural commission.

Town agricultural commissions are appointed town standing committees that encourage the pursuit of agriculture and sustain farm businesses and farmlands.

Several southeastern Mass. towns have formed ag. commissions and the concept is spreading to other parts of the state.

The RC&D program is administered by NRCS and promotes the wise use of natural resources to improve economic activity, the environment and the standard of living in communities.



USDA Natural Resources Conservation Service

The Natural Resources Conservation Service (NRCS) is the federal agency that shows farmers and other landowners how to improve and protect their natural resources through simple conservation practices and federal conservation programs that can improve water quality and maintain healthy and productive lands.

Americans have been consulting NRCS for decades; seeking expert advice on issues like erosion, water quality and soil productivity.

NRCS is not a regulatory agency. Rather, landowners and NRCS specialists work together on a voluntary basis to develop a conservation plan that leads to wise stewardship.

NRCS provides assistance directly to citizens and communities who request it. The agency is teeming with conservation specialists—biologists, planners, engineers, soil scientists, technicians and geologists—primed to address your natural resource concerns.

Conservation Districts

A conservation district is a subdivision of state government, established under state law to carry out programs for the conservation and wise management of soil, water and related resources.

There are 14 conservation districts in Massachusetts. Each district is governed by a board of supervisors – locally elected citizens who volunteer their time and leadership to the conservation effort.

Conservation district supervisors work directly with NRCS to deliver technical assistance to the people of Massachusetts. Each conservation district is a voice for the community, providing leadership on conservation issues and establishing priorities for conservation activities and programs.

The Bay State's 14 districts collaborate as a statewide organization through the Massachusetts Association of Conservation Districts (MACD).

The State Commission for Conservation of Soil, Water & Related Resources

As part of the Commonwealth's Executive Office of Environmental Affairs, the State Commission for Conservation of Soil, Water & Related Resources serves as a resource for local conservation districts.

Through state environmental agencies including the departments of Conservation and Recreation, Agricultural Resources, Fish & Game and Environmental Protection, conservation districts have access to state resources for delivery at the local level.

The State Commission also provides the mechanisms for regional projects such as the Massachusetts Envirothon a highly successful environmental education program for high school students.

Working closely with the USDA-NRCS the state commission provides excellent opportunities to coordinate and focus state and federal programs for conservation work in Massachusetts.

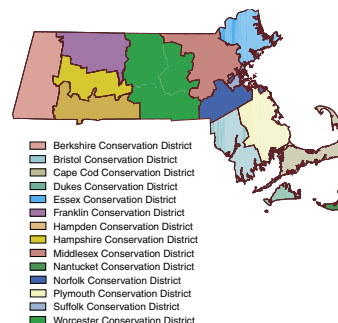
Resource Conservation & Development Councils

RC&D is a program of the United States Department of Agriculture (USDA). The program, administered by USDA's Natural Resources Conservation Service (NRCS) was created in 1962 and is based on the assumption that local citizens -- RC&D Councils -- with help provided through the USDA, can develop and carry out an action-oriented plan for the economic, social and environmental enrichment of their communities.

The RC&D Program promotes conservation, development, and use of natural resources to improve economic activity, and to enhance the environment and standard of living in all communities. The program's aim is to provide a system for rural development, encourage the wise use of natural resources, and improve the quality of life.

The Massachusetts Conservation Partnership

When state environmental agencies and local conservation districts work hand-in-hand with the USDA Natural Resources Conservation Service, the result is a strong Conservation Partnership for all of Massachusetts.



Contact Us

Massachusetts Association of Conservation Districts

President - **Marjorie Cooper**, Worcester
Vice President - **June Phillips**, Norfolk
Secretary - **Bob Lear**, Berkshire

State Commission for the Conservation of Soil, Water and Related Resources

Tom Anderson, Executive Secretary
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Resource Conservation and Development (RC&D) Council offices

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Conservation District Offices

Berkshire Conservation District

78 Center Street, Suite 206
Pittsfield, MA 01201
413-443-6867 Ext. 4

Bristol Conservation District

P.O. Box 475, 84 Center Street
Dighton, MA 02715
508-669-6558

Cape Cod Conservation District

P.O. Box 678
Barnstable, MA 02630
508-771-8757

Dukes Conservation District

P.O. Box 111
West Tisbury, MA 02575
508-645-9734

Essex Conservation District

562 Maple Street
Hawthorne, MA 01937
978-774-5578

Franklin Conservation District

55 Federal Street, Room 290
Greenfield, MA 01301
413-773-0286

Hampden and Hampshire Conservation Districts

195 Russell Street, Suite B6
Hadley, MA 01035
413-585-1000 Ext. 5

Middlesex Conservation District

319 Littleton Road, Suite 205
Westford, MA 01886
978-692-9395

Nantucket Conservation District

P.O. Box 1146
Nantucket, MA 02554
508-228-7244

Norfolk Conservation District

400 Main Street
Walpole, MA 02018
508-668-0995

Plymouth County Conservation District

15 Cranberry Highway
West Wareham, MA 02576
508-295-5151, Ext. 4

Suffolk Conservation District

P.O. Box 245
Boston, MA 02121
617-451-9141

Worcester County Conservation District

52 Boyden Road, Room 100
Holden, MA 01520
508-829-4477 Ext. 5

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Barnstable Field Office

508-771-6476
Serving Barnstable, Dukes and Nantucket counties
270 Communications Way, Unit 1G
Hyannis, MA 02601
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Greenfield Field Office

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Hadley Field Office

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Westford Field Office

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Westford, MA 01886
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West Wareham Field Office

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